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HEALTH CARE STUDIES AND

CLINICAL INVESTIGATION ACTIVITY

PHYSICIAN AND DENTIST SURVEY: DESERT STORM AND MILITARY MEDICINE

EXECUTIVE SUMMARY

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Headquarters, U. S. Army Health Serices Command requested a survey be conducted of civilian physicians and dentists to determine how Operation Desert Storm affected their attitudes toward military service. Of particular interest was the potential effect on recruitment. Because little is known about the attitudes of American Physicians and dentists toward military service, the survey results will assist in the planning and execution of federal policies and programs to attract health care providers to the military service.

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PHYSICIAN AND DENTIST SURVEY: DESERT STORM AND MILITARY MEDICINE

BACKGROUND

Operation Desert Storm (ODS) resulted in the largest mobilization of military medical support personnel and equipment since World War II. The mobilization of medical reserve units and individuals contributed heavily to the overall effort. In the aftermath of ODS, the Army Medical Department (AMEDD) was faced with a need to maintain a strong reserve force as well as to recruit and retain qualified health care providers in the active duty component. Since the reserves represent over 70% of the total AMEDD strength, factors affecting recruitment and retention of reserve physicians and dentists are of concern.

If ODS made future recruitment difficult or impossible, this would constitute a serious threat to the national interest since adequate medical support would not be immediately available for mobilization for future conflicts. The loss of significant numbers of physicians and dentists from the active component of the AMEDD and the inability to recruit new replacements would force greater reliance on civilian health care programs such as CHAMPUS and would drastically increase the cost of military health care to the government.

In the spring of 1991, a tasking came from Headquarters, U.S. Army Health Services Command requesting a survey be conducted of civilian physicians and dentists to determine how ODS affected their attitudes toward military service. Of particular interest was the potential effect on recruitment. Because little is known about the attitudes of American physicians and dentists toward military service, the survey results will assist in the planning and execution of federal policies and programs to attract health care providers to the military service.

METHOD

Subjects

The American Medical Association and the American Dental Association were contacted. Mailing labels for addresses of professionals under age 65 were requested from the association master data bases: names and addresses for 10,000 physicians and 5,000 dentists were obtained.

Procedure

A survey control number was assigned by the Office of Management and Budget (OMB Number 0702-0089, expiration 31 July 1993). Mailing labels were purchased from the American Medical Association and the American Dental Association. Problems with receiving OMB review and clearance for the survey slowed printing and delayed the mailing until February 1992.

The survey instruments were sent out during February and March 1992. As surveys were returned, the contents were edited and comments coded. Surveys were printed in two different colors (one color for physicians, another color for dentists).

Overview

Descriptive statistics were computed for both physician and dentist respondents. Regression equations were developed to predict (Q10) "Interest in serving on active duty" and (Q11) "Interest in serving in the reserves." Models for each profession were developed.

RESULTS

DEMOGRAPHICS

As of 1 September 1992, responses had been received from 1,165 dentists and 1,151 physicians, with an additional 790 surveys returned as undeliverable (621 physicians/169 dentists). The usable return rates were 12.2% for physicians and 24.1% for dentists.

PHYSICIANS

Descriptive Statistics

The majority of the physician respondents (83.2%) reported (Q8) not being presently in the military; 107 physicians reported being on active duty, and 88 physicians reported being in the reserves. The majority of the physicians had not previously served as physicians in the military (81.5%). Of those who had no prior military experience, 5.0% reported (Q10) being interested in serving on active duty as a physician and 11.3% reported (Q11) being interested in serving in the reserves as a physician. ODS positively influenced 16.7% of physicians toward serving on active duty (Q12) and 23.8% of physicians toward serving in the reserves (Q13).

Regression Equations

The criterion variable was (Q10) "Interest in serving on active duty as a physician." The stepwise regression equation developed to predict "Interest in serving on active duty as a physician" was significant, $F\ (7,667) = 30.99$, $p < .0001$ (multiple $r = .495$, $R^2 = .245$).

A second criterion variable was (Q11) "Interest in serving in the reserves as a physician." The stepwise regression equation developed to predict "Interest in serving in the reserves as a physician" was significant, $F\ (10,664) = 36.65$, $p < .0001$ (multiple $r = .596$, $R^2 = .355$).

DENTISTS

Descriptive Statistics

The majority of the dentist respondents (82.8%) reported (Q8) not being presently in the military; 105 dentists reported being on active duty and 97 dentists reported being in the reserves. The majority of the dentists had not previously served as dentists in the military (76.4%). Of the dentists who had no prior military experience, 11.8% reported (Q10) being interested in serving on active duty as a dentist and 11.3% reported (Q11) being interested in serving in the reserves as a dentist. ODS positively influenced 15.5% of dentists toward serving on active duty (Q12) and positively influenced 21.3% of dentists toward serving in the reserves (Q13).

Regression Equations

The criterion variable was (Q10) "Interest in serving on active duty as a dentist." The stepwise regression equation developed to predict "Interest in serving on active duty as a dentist" was significant, $F(8,726) = 39.91$, $p < .0001$ (multiple $r = .552$, $R^2 = .305$).

A second criterion variable was (Q11) "Interest in serving in the reserves as a dentist." The stepwise regression equation developed to predict "Interest in serving in the reserves as a dentist" was significant, $F(10,724) = 36.42$, $p < .0001$ (multiple $r = .578$, $R^2 = .334$).

DISCUSSION

The findings documented several issues relevant to the effects of ODS on civilian physicians and dentists. In comparing the professional groups, the interest in serving on active duty was greater among dentists than physicians. Traditionally, recruiting dentists for the armed services has been easier than recruiting physicians.

Only a small percentage of physicians were interested in serving on active duty as physicians (5.0%). For those physicians interested in serving on active duty as a physician, there were several significant contributing elements revealed in the regression equations: the possible challenge of practicing in combat, practice opportunities in an active duty environment, positive feelings created by ODS, field training with units, and overseas assignments.

For dentists interested in serving on active duty as dentists, the contributing factors in the regression equations were similar: practice opportunities in an active duty environment, positive feelings created by ODS, overseas assignments, and possible challenge of practicing in combat. Other favorable factors included salary and specialty bonuses.

In examining the reasons for interest in participating in the reserves, physicians cited the following: practice opportunities and being in a reserve environment, the possibility of being activated from the reserves to practice in combat, positive feelings created by ODS to serve in the reserves, and field training with units. Dentists reported similar reasons including: ODS influence to serve in the reserves, practice opportunities in a reserve environment, the possibility of being activated from the reserves to practice in combat, overseas duty (peacetime), service to country, and malpractice protection.

Military health care professional training programs (residencies, fellowships) are the primary vehicles for attracting professionals to join the armed services (Whelan, 1974; Krause, 1978). Opportunities to be professionally challenged as a health care provider on active duty or in the reserves (in combat, overseas, or in field settings) also stimulate interest in joining the military. Recruiting slogans feature the possibilities of adventure and individual development for active duty personnel. Other reasons include service to country, income, and malpractice protection.

Army physicians' attitudes toward military medicine have been documented (Baker, 1969; Cooke, Hymes, and Mixson, 1967; Hughes, 1974; Mangelsdorff and Hubbart, 1976). In general, Army physicians are satisfied with their military practice opportunities.

Clegg (1992) documented the effects of ODS on the active medical recruiting network. A number of physicians and nurses in the reserves applied to convert to active duty status. Among the reasons reported why the reservists converted were the loss of their private practices while activated or the discovery that they enjoyed practicing in the military. Clegg reported that a task force was formed in February 1991 to evaluate the effects of ODS on recruiting and retention. It was projected that changes in active component recruiting would be minimal, but reserve recruiting would lag.

Mangelsdorff and Moses (1993) surveyed Army medical reservists as they demobilized after ODS. In general, the reservists were proud of their contributions. The number of resignations from the reserves after ODS was not the meltdown predicted. Lessons learned from ODS indicated that leadership and effective communication were critical factors in the success (or failure) of the mobilization of reserve medical personnel.

The success of ODS stimulated some physicians and dentists to consider joining the military; others changed from reserve to active duty status. Whether the interest in the military will persist, particularly during the current downsizing of the military forces, remains to be determined.

CONCLUSIONS

Of the physicians with no prior military experience, only a small percentage (5.0%) were interested in serving on active duty as physicians. Among the dentists with no prior military experience, 11.8% reported being interested in serving on active duty as a dentist.

Regression models were developed to predict interest in serving on active duty or in the reserves. The common variables predictive of interest in military service included: possible challenges of practicing in combat, practice opportunities and environment, ODS influence, field training with units, and overseas (peacetime) assignments. Recruiting campaigns emphasizing the challenges and adventure, in addition to the success of ODS, seem to have heightened some interest.

RECOMMENDATIONS

Recruitment programs need to continue to emphasize the challenges and opportunities for practicing as health care professionals in the military.

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